ELSEVIER

Volume 549, Numbers 1–2, 18 December 1997

Journal of Organometallic Chemistry

Contents

Synthesis, characterisation and reactions of 1,3-bis(trimethylsilyl)-1-aza-allyl-lanthanide complexes; X-ray structures of $[Sm(LL')_2I(thf)]$, $[Yb(LL')_2]$ and $[RN{=}C(Bu^t)CH(R)]_2$ (thf = tetrahydrofuran, LL' = η^3-N(R)C(Bu^t)CHR, R=$SiMe_3$)
P.B. Hitchcock, M.F. Lappert and S. Tian 1

A molecular structure of mixed valence biruthenocenium ($Ru^{II}Ru^{IV}$) salts $[Ru^{II}Cp(C_5H_4C_5H_4)CpRu^{IV}L]^{2+}(BF_4^-)_2$ (L = $NCCH_3$, $N(CH)_4N$)
M. Watanabe, I. Motoyama, T. Takayama and M. Sato 13

The synthesis of novel bridging cyclopentadienyl W–Sn(IV) bonded bimetallic complexes. Crystal structure of $Cl_3SnMo(CO)_3C_5H_4(CH_3)C{=}N{-}NHC_6H_3(NO_2)_2$ and μ-$[C_5H_4(CH_3)C{=}N{-}N(CO)Ph]W(CO)_3SnCl_2 \cdot (EtOH)_2$
J.-T. Wang, H.-Y. He, Y.-M. Xu, J. Sun and X.-F. Kong. 25

Synthesis and characterization of a series of aminogallanes, $[Me_2GaR]_2$. The crystal structures of $[Me_2GaN(CH_2Ph)_2]_2$ and $[Me_2GaN(CH_2CH_2)_2NMe]_2$
S.J. Schauer, C.H. Lake, C.L. Watkins, L.K. Krannich and D.H. Powell 31

Thermal decomposition of $[Me_3SiNCH_2CH_2NSiMe_3] \cdot Li_2(THF)_2$ to $[LiN(SiMe3)_2 \cdot THF]_2$ via a 1,4-trimethylsilyl shift
H. Mack, G. Frenzen, M. Bendikov and M.S. Eisen 39

Radiochemical study of the reactions between the methyl cation and hexamethyldisilazane
T.A. Kochina, D.V. Vrazhnov and I.S. Ignatyev 45

Synthesis of a new iron tricarbonyl (η^4)-α-pyrone complex by reaction of iron vinyldiketone complexes with methyllithium under a CO atmosphere
C. Alvarez-Toledano, S. Hernández-Ortega, S. Bernès, R. Gutiérrez-Pérez and O. García-Mellado 49

Optically active pentanuclear wing-tip butterfly heterotrimetallic clusters
S.P. Gubin, T.V. Galuzina, I.F. Golovaneva, A.P. Klyagina, L.A. Polyakova, O.A. Belyakova, Ya.V. Zubavichus and Yu.L. Slovokhotov 55

Synthesis and characterization of cyclometallated palladium(II) dithiolate complexes of the type [Pd(E ^ C)(S ^ S)]
S. Narayan, V.K. Jain and R.J. Butcher 73

Ab initio theoretical study of 3-aminopyrrolidines lithium amides as chiral ligands for butyllithium
C. Fressigné, A. Corruble, J.-Y. Valnot, J. Maddaluno and C. Giessner-Prettre 81

Conversion of a manganese–carbon-bonded complex to a manganese–oxygen-bonded complex, some reactions of manganese carbonato complexes
G.Q. Li, R.M. Burns, S.K. Mandal, J. Krause Bauer and M. Orchin 89

Syntheses of indenyl lanthanide derivatives and the molecular structures of $[(C_9H_7)_2PrCl(THF)]_2$ and $[(C_9H_7)_3La(THF)]$
Q. Shen, M. Qi, S. Song, L. Zhang and Y. Lin 95

Cyclooctatetraenyl complexes of the early transition metals and lanthanides. IX. (Cyclooctatetraenyl)lanthanide diazadiene complexes
P. Poremba and F.T. Edelmann 101

Products from the photoreaction of $(Me_3P)(OC)_4OsW(CO)_5$ with CCl_4; synthesis and isomerization of $Os(CO)_3(PMe_3)Cl_2$
J.L. Male, F.W.B. Einstein, W.K. Leong, R.K. Pomeroy and D.R. Tyler 105

Synthesis and characterization of pentamethylcyclopentadienylrhodium(III) and -iridium(III) complexes with 1,2-benzenedithiolate: $[(Cp^*Rh)_2(\mu(S)\text{-}1,2\text{-}C_6H_4S_2\text{-}S,S')_2]$, $[(Cp^*Rh)_2(\mu(S)\text{-}1,2\text{-}C_6H_4S_2\text{-}S,S')(\mu(S)\text{-}1,2\text{-}C_6H_4S(SO_2)\text{-}S,S')]$ and $[(Cp^*Ir)(1,2\text{-}C_6H_4S_2\text{-}S,S')]$ ($Cp^* = \eta^5$-$C_5(CH_3)_5$)
R. Xi, M. Abe, T. Suzuki, T. Nishioka and K. Isobe 117

Organometallic complexes for nonlinear optics. X. Molecular quadratic and cubic hyperpolarizabilities of systematically varied (cyclopentadienyl)bis(phosphine)ruthenium σ-arylacetylides: X-ray crystal structure of Ru((*E*)-4,4'-C$\equiv$$CC_6H_4CH{=}CHC_6H_4NO_2$)$(PPh_3)_2(\eta$-$C_5H_5)$
I.R. Whittall, M.P. Cifuentes, M.G. Humphrey, B. Luther-Davies, M. Samoc, S. Houbrechts, A. Persoons, G.A. Heath and D.C.R. Hockless. . . 127

Elsevier Science S.A.

Tripod-Liganden mit Cyclopentadienyl-Donorgruppe: Synthese und Reaktivität von Komplexen des Typs $CH_3C(CH_2\text{-}\eta^5\text{-}C_5H_4)(CH_2PR_2)(CH_2PR'_2)FeCl$
B. Antelmann, G. Huttner, J. Vogelgesang, O. Walter und U. Winterhalter 139

Vertical electron affinities in substituted trimethylsilanes
A. Modelli, F. Scagnolari, G. Distefano and M. Dal Colle 149

Different coordination modes of 3-hydroxy-1,2,3-benzotriazin-4(3*H*)-one: Molecular structures of $(\mu\text{-H})Os_3(CO)_{10}(\mu_2\text{-}(2,3\text{-}\eta^2)\text{-}(O)NNNC_7H_4O)$ and $(\mu\text{-H})Ru_3(CO)_{10}(\mu_2\text{-}(1,2\text{-}\eta^2)\text{-}NNN(O)C_7H_4O)$
S. Kumaresan, K.-L. Lu, J.-T. Hung, F.-Y. Lee, Y.-S. Wen and J.R. Hwu 155

1-Fluorogermatrane—germatrane with the shortest intramolecular N → Ge bond
E. Lukevics, S. Belyakov, P. Arsenyan and J. Popelis 163

Synthesis and reactivity of new palladium alkyl complexes containing PMe_3 ligands: Insertion reactions and formation of bis(pyrazolyl)borate derivatives
E. Gutiérrez, M.C. Nicasio, M. Paneque, C. Ruiz and V. Salazar 167

Metallocene dichlorides bearing acenaphthyl substituted cyclopentadienyl rings: preparation and polymerization behavior
T. Repo, G. Jany, K. Hakala, M. Klinga, M. Polamo, M. Leskelä and B. Rieger 177

The first oxygen-bridged diorganoarsenic(V) compound: the crystal structure of $AsMe_2(S)OAs(S)Me_2$
L. Silaghi-Dumitrescu, S. Pascu, I. Silaghi-Dumitrescu, I. Haiduc, M.N. Gibbons and D.B. Sowerby 187

Synthesis and crystal structures of the distorted pentagonal bipyramidal seven-coordinate acetylacetonate complexes $[MI(acac)(CO)_2(PEt_3)_2]$ (M = Mo or W)
P.K. Baker, A.I. Clark, M.G.B. Drew, M.C. Durrant and R.L. Richards 193

The action of lithium perchlorate in ether on (allyl propargyl ether) hexacarbonyldicobalt complexes
P.L. Pauson and M.D. Spicer 199

Crystal structure, conformational diversity and solution NMR spectroscopy of four tris(indenyl)lanthanoid(III)tetrahydrofuran adducts: $[Ln(C_9H_7)_3 \cdot THF]$ (Ln = La, Pr, Nd, Sm)
J. Guan, Q. Shen and R.D. Fischer 203

Synthesis of polydiphenylphosphite derivatives of [60]fullerene and their reactions with metal complexes
M. Iglesias and A. Santos 213

The interaction of $[Cp^*RuCl(dippe)]$ and $[CpRuCl(dippe)]$ with alkynols: hydroxyvinylidene, allenylidene and related derivatives (dippe = 1,2-bis(diisopropylphosphino)ethane)
I. De los Ríos, M. Jiménez Tenorio, M.C. Puerta and P. Valerga 221

Proton sponge as a carbon nucleophile, addition to a putative carbocation linked to a dicarbacobaltaborane cage
F.S. McQuillan, T.A. Hamor, R. Tanna, P.R. Ashton, M.S. Tolley and C.J. Jones 233

Systematic studies on the reactions of lanthanide trichlorides with Na[1,3-bis(trimethylsilyl)cyclopentadienyl]. Crystal structures of $[1,3\text{-}(Me_3Si)_2C_5H_3]_3Ln$ (Ln = La, Nd, Gd, Dy)
Z. Xie, K. Chui, Z. Liu, F. Xue, Z. Zhang, T.C.W. Mak and J. Sun 239

Hydrocarbon bridged metal complexes: XLII. Addition of aniline tricarbonyl chromium complexes to the dienyl ligands of $[(\eta^5\text{-}H_3CC_5H_5CH_3)Fe(CO)_3]^+$ and $[(\eta^5\text{-}C_5H_6CH_3)Fe(CO)_3]^+$
H.-J. Bentele, K. Sünkel and W. Beck 245

Chirale Titan- und Zirkoniumkomplexe mit dem 1-(8-Chinolyl)-2,3-dimethylcyclopentadienyl-Liganden
M. Enders, R. Rudolph und H. Pritzkow 251

Observations on the synthesis and chemistry of a complete series of phenylazophenyl(C,*N'*)tellurium(II) halides (fluoride, chloride, bromide and iodide)
Z. Majeed, W.R. McWhinnie and T.A. Hamor 257

Triruthenium clusters containing vinyl ligands: synthesis and structure of $Ru_3(\mu_2\text{-}CO)_2(CO)_6[\mu_3\text{-}NS(O)MePh](\mu_2\text{-}\eta^1,\eta^2\text{-}PhCH_2C{=}CH_2)$, $Ru_3(\mu_2\text{-}CO)(CO)_7[\mu_3\text{-}NS(O)MePh](\mu_3\text{-}\eta^1,\eta^2\text{-}Pr^nC{=}CHPr^n)$, $Ru_3(\mu_2\text{-}CO)(CO)_7[\mu_3\text{-}NS(O)MePh](\mu_3\text{-}\eta^1,\eta^2\text{-}PhC{=}CHBu^n)$, and $(\mu_2\text{-}H)Ru_3(CO)_6(\mu_2\text{-}\eta^1,\eta^2\text{-}PhC{=}CHPh)(\mu_3\text{-}\eta^1,\eta^2\text{-}PhC{\equiv}CPh)[\mu_3\text{-}\eta^1,\eta^2\text{-}NS(O)Me(C_6H_4)]$
V. Ferrand, K. Merzweiler, G. Rheinwald, H. Stoeckli-Evans and G. Süss-Fink 263

Carbon–carbon coupling reactions on triruthenium clusters: synthesis and structure of $Ru_3(CO)_9[\mu_3\text{-}\eta^3\text{-}PhCCCC(H)Ph][\mu_2\text{-}NS(O)MePh]$ and $Ru_3(\mu_2\text{-}CO)(CO)_7[\mu_3\text{-}\eta^3\text{-}PhCCCC(H)Ph][\mu_3\text{-}NS(O)MePh]$
V. Ferrand, C. Gambs, N. Derrien, C. Bolm, H. Stoeckli-Evans and G. Süss-Fink 275

Crystallographic studies of {η^3-1,3-dimethylallyl}{2-[2′-(diphenylphosphino)phenyl]oxazoline-P,N} palladium(II) hexafluorophosphates complexes complemented by ^{1}H NMR investigations
S. Liu, J.F.K. Müller, M. Neuburger, S. Schaffner and M. Zehnder 283

Synthesis and detailed NMR study of tricarbonylrhenium(I) and trimethylplatinum(IV) halide complexes of 2-methylthiomethyl-4-(S)-methyl-1,3-oxazoline (L). X-ray crystal structure of *fac*-[ReBr(CO)$_3$L]
P.J. Heard and D.A. Tocher 295

High γ-selectivity in the coupling of penta-2,4-dienyl- and pent-2-en-4-ynylindium reagents with aldehydes
T. Hirashita, S. Inoue, H. Yamamura, M. Kawai and S. Araki 305

Organic syntheses via transition metal complexes, XCI[1]. Dihydropyridinyl carbene complexes by [4 + 2] annulation of alkenyl- or aryl imines to (1-alkynyl)carbene complexes of chromium and tungsten
R. Aumann, Z. Yu and R. Fröhlich 311

Short Communication
Multiple bonds between transition metals and main-group elements. Part 168. Methyltrioxorhenium/Lewisbase catalysts in olefin epoxidation
W.A. Herrmann, H. Ding, R.M. Kratzer, F.E. Kühn, J.J. Haider and R.W. Fischer 319

Author Index of Volume 549 323

Subject Index of Volume 549 325

Conference Calendar 333

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. A leaflet describing our requirements is available from the publisher upon request.